

**Section 1**

(to be completed by all applicants for ethics approval and/or funding application)

Name

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Department

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Title of Project

The power of design on flexible learning and digital network literacy

Executive Summary / Abstract of Project¹

(Please make this jargon-free so it can be understood by someone not from your discipline. Please also explain how your project fits into the local, national or international context for your discipline.)

A research evaluation will be conducted to investigate the effectiveness of a new course in the Graduate Certificate in Tertiary learning and teaching (GCTLT). The course is called *Designing for Flexible Learning Practice* and is one of the compulsory courses in the programme. The course will be evaluated against three eLearning guidelines (listed below) taken from eLearning Guidelines for NZ at: <http://elg.massey.ac.nz/>

- TD11 - Should staff use a team approach to develop and teach the course?
- TD12 - Is the design of learning informed by research on effective eLearning?
- TO9 - Are staff encouraged to participate in networks and learning communities involved in reviewing, developing or sharing good practice in the use of e-learning?

¹ Include your aims and objectives, specify original research content, reason for undertaking the work, relevance to R&D plans, details of collaboration, cultural considerations and potential for further work or revenue generation.

Additionally, there will be an investigation into how strategies which are used to promote networked learning and engagement in learning communities influence participants' digital network literacy and level of self-efficacy for eLearning.

Digital network literacy "...the set of abilities and skills where aural, visual and digital literacy overlap. These include the ability to understand the power of images and sounds, to recognize and use that power, to manipulate and transform digital media, to distribute them pervasively, and to easily adapt them to new forms" (The New Media Consortium (2004).

Self-efficacy in eLearning is defined as: "The belief people have in their own abilities to perform in particular areas related to eLearning. The higher the level of self-efficacy the more confident one is to deal with challenges in eLearning" (Hegarty, Penman, Brown, Coburn, Kelly, Gower, Sherson, Suddaby, Moore (2005).

The following research questions will be investigated:

1. how effective was the team approach to developing and implementing the course?
2. to what extent does research on effective eLearning inform the design of the course (Designing for Flexible Learning Practice, DFLP)?
3. how are participants and facilitators in DFLP encouraged to engage in networks and learning communities to review, develop or share good practice in the use of e-learning?
4. in what ways does participation in the course (DFLP) enhance digital network literacy and self-efficacy for eLearning?

Participants will be eligible to take part in the research evaluation once they have completed the course and the course requirements, and this will avoid any impact on their progress in the course. Participants will be surveyed to gather demographic data and also to investigate aspects of their digital network literacy and self-efficacy for eLearning. Facilitated focus groups will be conducted with course participants who have completed the course to explore aspects of their experience participating in the course, their perceptions of their own digital network literacy and self-efficacy in eLearning and to build on information obtained in the survey. Qualitative data will be obtained from the focus groups in the way of notes and audio recording, and will be transcribed and analysed to determine patterns and themes. Participants will also be asked to give permission for any material submitted for assessment in the course to be examined by the researchers. The assessments will be examined to determine their level of digital network literacy and self-efficacy in eLearning. Participants will be eligible to take part in the research evaluation once they have completed the course and the course requirements, and this will avoid any impact on their assessments.

Researchers/course facilitators will take part in a focus group between themselves with an external researcher facilitating the session. The purpose of this is to debrief about the process of designing, developing and teaching the course. The session will be audio recorded and notes also taken. The audio recording will be transcribed and analysed for themes and patterns. Records kept by the course facilitators will be examined to consolidate the data collected during the focus group debrief.

Findings from the research evaluation will inform future iterations of the course design and implementation for Designing for Flexible Learning Practice, DFLP. The findings will be presented as a case study and will contribute to the bank of case studies of best practice being created as part of a larger project called: Implementing e-Learning Guidelines across the Tertiary Sector; a larger Innovation Development Fund (IDF) project, supported by TEC.

The research evaluation of the DFLP course at Otago Polytechnic is part of one of twenty-one smaller projects testing a range of eLearning Guidelines established for the New Zealand tertiary sector. The eLearning Guidelines were developed as part of a 2005 eLearning Collaborative Fund (eCDF) project

supported by the Tertiary Education Commission (TEC) and Ministry of Education. They were “..designed to help institutions improve their e-learning practice. They have been designed for teachers, support staff and managers, and provide up-to-date, practical information and direction on e-learning. The design of the guidelines encourages further development and discussion from the tertiary community.” (<http://elg.massey.ac.nz/>) The full report is available on the website.

Implementing e-Learning Guidelines across the Tertiary Sector.

“The purpose of this project is to introduce a common e-learning framework based on the NZ e-Learning Guidelines (<http://elg.massey.ac.nz/>) across the tertiary sector. This framework is consistent with international guidelines such as the eFramework being developed in the UK and Australia and is reflective of the growing body of NZ knowledge, understanding and expertise being developed through initiatives such as the e-Learning Collaborative Development Fund.

The project provides a mechanism for developing, introducing, trialling, evaluating, and sharing the exemplars of e-Learning guidelines which have been developed in the New Zealand context. The project and its outcomes will explicitly reflect the purposes of the Innovation and Development Fund by: advancing and making publicly available best practice in eLearning; maximising the benefits of eLearning initiatives; and complementing the work of agencies involved in advancing eLearning.” (TEC, 2007.)

Commencement Date:

31 October 2007

Completion Date:

30 June 2008

What benefits will this research bring to Otago Polytechnic?

(insert x in yellow boxes if applicable):

A research output will be generated from this project

Journal article *(which journals will you submit to?)*

Yes but not sure yet. Possibly the Knowledge Tree or AJET (Australian Journal of Educational Technology)

Exhibition *(which gallery?)*

Design object *(where will it be displayed?)*

Book/Book chapter *(who will be the publisher?)*

Conference presentation/Proceedings *(which conference?)*

Other *(please specify)*

Report for Tertiary Education commission

The project will contribute to the overall development of the research environment or research culture *(please specify how)* There will be three researchers involved from the Educational Development Centre at Otago Polytechnic who will be investigating educational effectiveness of a new course, *Designing for Flexible Learning Practice*, a compulsory course in the Graduate Certificate in Tertiary learning and teaching (GCTLT).

The project will give other staff and/or students opportunities to gain research skills or experience *(please explain how this will be facilitated)*

Participants in the project are all academic staff at OP, therefore, educational research practices which they could use in their own teaching will be modelled. It is a research evaluation and will not be participatory but academic staff will be able to see a range of research techniques in use and will have access to the final report.

Is this study related to enrolment at another institution?

| | |
|-----|---|
| Yes | |
| No | x |

If 'yes', which:

Is this application for (x more than one box as applicable):

| | |
|------------------|---|
| Ethical Approval | x |
| Funding | |

I have completed sections:

| | |
|---|--|
| 1 | |
| 2 | |
| 3 | |

I understand that I will need to supply each committee with a brief report at the conclusion of the research.

Signed

NB: A copy of your application must be sent to the Interim Treaty Compliance Committee

Section 2

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Application for Ethics Approval

Please ensure that you have read the **Otago Polytechnic Ethical Guidelines** before writing your application.

- Please use this format when preparing your application.
- Do not omit any headings or sub-headings.

PROJECT TITLE:

The power of design on flexible learning and digital network literacy

1. DESCRIPTION

1.1. Justification

A research evaluation will be conducted to investigate the effectiveness of a new course in the Graduate Certificate in Tertiary learning and teaching (GCTLT). The course is called *Designing for Flexible Learning Practice* and is one of the compulsory courses in the programme. The course will be evaluated against three eLearning guidelines (listed below) taken from eLearning Guidelines for NZ at: <http://elg.massey.ac.nz/>

- TD11 - Should staff use a team approach to develop and teach the course?
- TD12 - Is the design of learning informed by research on effective eLearning?
- TO9 - Are staff encouraged to participate in networks and learning communities involved in reviewing, developing or sharing good practice in the use of e-learning?

Additionally, there will be an investigation into how strategies which are used to promote networked learning and engagement in learning communities influence participants' digital network literacy and level of self-efficacy for eLearning.

The project is part of a bigger project called: Implementing e-Learning Guidelines across the Tertiary Sector, and is resourced by the 2007/2008 Innovation and Development Fund supplied by the Tertiary Education Commission.

Background

Ideally, educational theory and models should inform the structure of online course development and implementation. In reality, however, particularly with the pervasive use of Learning Management Systems, the templates and features these systems provide tend to drive the design of online courses. In other words current and emerging pedagogical frameworks and models, especially for online learning, have to fit pre-determined LMS structures and features rather than the reverse (Siemens, G. (2004). Learning Management Systems: The wrong place to start learning. Available at: <http://www.elearnspace.org/Articles/lms.htm>).

Historically the use of LMS for institutionalised online learning may be attributed to management concerns over staff levels of *digital network literacy* and self-efficacy with eLearning, and the need for a system to standardise information and communication around online courses. But as those two issues evolve and Internet based information and communication becomes generally demystified, pedagogical frameworks and models can re-emerge as the focus for facilitating learning rather than the inevitable limitations of specified

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technologies and systems.

Digital network literacy - while still emerging as a new form of literacy, may be defined by the following statement: "...the set of abilities and skills where aural, visual and digital literacy overlap. These include the ability to understand the power of images and sounds, to recognize and use that power, to manipulate and transform digital media, to distribute them pervasively, and to easily adapt them to new forms" (The New Media Consortium (2004). A global imperative: The report of the 21st Century literacy summit. Available at: http://www.newmediacenter.org/pdf/Global_Imperative.pdf)

Self-efficacy in eLearning is defined as: "The belief people have in their own abilities to perform in particular areas related to eLearning. The higher the level of self-efficacy the more confident one is to deal with challenges in eLearning " (Hegarty, B., Penman, M., Brown, C. & Coburn, D. et al. (2005). Approaches and implications of eLearning adoption in relation to academic staff efficacy and working practice. lead researcher and writer of the report. Universal College of Learning & Ministry of Education. Available at: <http://cms.steo.govt.nz/eLearning/Projects/Tertiary+%28e%9Learning+Research+Fund+%28TeLRF%29.htm> Ministry of Education New Zealand.)

1.2. Aim / Objectives

Aim: To evaluate *Designing for Flexible Learning Practice* course against three eLearning guidelines taken from eLearning Guidelines for NZ.

Objectives:

The research evaluation will do the following:

- measure the effectiveness of the design, development and implementation of the Designing for Flexible Learning Practice course.
- inform future iterations of the course design and implementation for Designing for Flexible Learning Practice, DFLP.
- enable a case study to be contributed to the bank of case studies of best practice being created as part of a larger project called: Implementing e-Learning Guidelines across the Tertiary Sector.

Findings will be obtained to answer the following research questions:

- how effective was the team approach to developing and implementing the course?
- to what extent does research on effective eLearning inform the design of the course (Designing for Flexible Learning Practice, DFLP)?
- how are participants and facilitators in DFLP encouraged to engage in networks and learning communities to review, develop or share good practice in the use of e-learning?
- in what ways does participation in the course (DFLP) enhance digital network literacy and self-efficacy for eLearning?

1.3. Procedures for recruiting participants and obtaining informed consent

Participants who have enrolled and participated or are participating in the *Designing for Flexible Learning Practice* course will be invited to take part in the research evaluation. Invitations will be sent out along with an information sheet about the project. Both email

and internal post will be used to contact participants.

1.4. Procedures in which research participants will be involved

Participants will be asked to complete a survey to obtain demographic data including years and experience in teaching. The survey will also include questions to help the researchers determine levels of digital network literacy and self-efficacy with eLearning.

Facilitated focus groups will be conducted with course participants who have completed the course to explore aspects of their experience participating in the course, their perceptions of their own digital network literacy and self-efficacy in eLearning and to build on information obtained in the survey. Qualitative data will be obtained from the focus groups using notes and audio recordings. Focus group recordings will be transcribed and analysed.

Material submitted for assessments in the course will also be examined as part of the investigation into levels of digital network literacy and self-efficacy in eLearning; permission to do this will be requested from the participants.

Researchers/course facilitators will take part in a focus group between themselves with an external researcher facilitating the session. The purpose of this is to debrief about the process of designing, developing and teaching the course. The session will be audio recorded and notes also taken. The audio recording will be transcribed and analysed for themes and patterns. Records kept by the course facilitators will be examined to consolidate the data collected during the focus group debrief.

1.5. Procedures for handling information and material produced in the course of the research including

raw data and final research report(s)

Raw data will be securely destroyed (shredded, audio destroyed etc) five years after the project. The final research report will be submitted to the project manager of the eLearning Guidelines project for submission to the Tertiary Education Commission. No identifying material such as names or specific locations will be mentioned in the report. Participants will be offered a copy of the final report. Focus group transcriptions will be sent to participants for checking using non-identifying labels for names – people should be able to recognise what they said.

1.6. Procedures for sharing information with research participants

Participants will be informed about the research via email and an information sheet. They will also be able to follow the progress of the project by accessing reports on WikiEducator at: <http://tinyurl.com/2vu6cd>

1.7. Arrangements for storage and security, return, disposal or destruction of data

Raw data will be kept in a folder on a secure, passworded network at Otago Polytechnic. Audio recordings and hard copy material will be kept in a locked filing cabinet. Only the researchers and research assistant will have access to the raw data.

2. ETHICAL CONCERNS

- 2.1. Access to participants
Participants in the Designing for Flexible Learning Practice course will be invited by email and internal mail to participate in the research evaluation. Facilitators in the course are also the researchers, but an external person will be used to facilitate focus groups.
- 2.2. Informed consent
All participants will be sent an information sheet outlining the project and the purpose of the research evaluation.
- 2.3. Anonymity and/or confidentiality
All material collected during the course of the project will be kept confidential between the researchers and research assistant. Raw data will be coded and names removed. Transcriptions of the focus group interviews will be identified using codes for names. Only pseudonyms will be used in the project reports and publications and any information which could potentially identify participants will be excluded.
- 2.4. Potential harm to participants and how this will be managed
Participants will be eligible to take part in the research evaluation once they have completed the course and the course requirements, and this will avoid any impact on their progress in the course. Participants need to feel able to voice their opinions about the course openly without fear of retribution or fear of failing the course. To address the latter issue, current participants in the course will not be invited to participate until early next year once they have completed the course. To enable participants to provide open and honest feedback and opinion, an independent interviewer will be used to gather information. The researchers/course facilitators will not be allowed access to the audio recordings of participant focus groups, only the transcribed documents. This will prevent facilitators of the course identifying participants' voices and statements.
- 2.5. Potential harm to researcher(s) and how this will be managed
Researchers may be given some feedback from participants in focus group sessions which might be difficult to deal with i.e. critical of the course and/or facilitators, therefore they will not conduct the focus groups. An independent interviewer will do this. Researchers will get to read the feedback so will need to debrief with an independent facilitator, skilled in dealing with sensitive issues.
- 2.6. Potential harm to the Polytechnic and how this will be managed
Negative feedback about the course may impact on enrolments in the course. Therefore any feedback obtained during the research evaluation will be acted upon to make improvements to how the course is run and the content covered.
- 2.7. Participant's right to decline to take part or withdraw
All participants have the right to refuse to take part in the research evaluation without fear of harassment or retribution and will be informed of this right in the information sheet.
- 2.8. How the information will be used
Feedback obtained during the research evaluation will be reported to the coordinator of the Graduate Certificate in Tertiary Learning and Teaching (GCTLT) and acted upon to make improvements to the course before the next session. A report will also be made

to the research office and Leadership Team. The findings from this project will contribute to the bigger IDF project, and will also make a contribution to the evaluation of eLearning regarding best practice for the tertiary sector as well as the development of eLearning Guidelines nationwide.

- 2.9. Conflict of interest / Conflict of roles
The researchers are also facilitators in the course, therefore an independent interviewer will be used to conduct focus groups with participants and also to facilitate the focus group where the facilitators discuss the course amongst themselves. The researchers will need to develop semi-structured interview questions for the focus group as they know the subject and the environment. However, the interview methodology will allow some exploration of the issues and will promote open and honest feedback.
- 2.10. Other ethical concerns, eg sources of funding
Nil.

3. CULTURAL CONSIDERATIONS

- 3.1 Treaty of Waitangi
Some feedback may be relevant to the Treaty of Waitangi and staff in the Treaty of Waitangi centre will be contacted for advice where necessary.
- 3.2 Other cultural and ethnic inclusions and exclusions
There may be a need to seek advice from the Pacific Island coordinator if there is feedback relating to Pasifika interests.

4. OTHER LEGAL CONSIDERATIONS

- 4.1. Legislation
Indicate where applicable the relevance of any legislation.
This project is sub-contracted to Massey University. I do not for see any issues arising unless the project is held up and cannot progress.

5. OTHER ETHICAL BODIES RELEVANT TO THIS RESEARCH

- 5.1. Ethics Committees
Note: List other ethics committees to which you are referring this application.
Nil
- 5.2. Professional Codes
Note: List all New Zealand professional codes to which this research is subject.
nil

6. OTHER RELEVANT CONSIDERATIONS

Note: List any other issues you would like to discuss with the Otago Polytechnic Ethics Committee.
nil

Participant Information Form

Project title: The power of design on flexible learning and digital network literacy

General Introduction:

A research evaluation is being conducted to investigate the effectiveness of the course called *Designing for Flexible Learning Practice*. This is one of the compulsory courses in the Graduate Certificate in Tertiary Learning and Teaching programme. The researchers are seeking your participation in the research evaluation project.

What is the aim of the project?

In this project, the researchers will be evaluating the *Designing for Flexible Learning Practice* course against three eLearning guidelines taken from eLearning Guidelines for NZ. at: <http://elg.massey.ac.nz/>
The three elearning guidelines are as follows:

- TD11 - Should staff use a team approach to develop and teach the course?
- TD12 - Is the design of learning informed by research on effective eLearning?
- TO9 - Are staff encouraged to participate in networks and learning communities involved in reviewing, developing or sharing good practice in the use of e-learning?

Additionally, there will be an investigation into how strategies, which are used to promote network learning and engagement in learning communities, influence participants' digital network literacy and level of self-efficacy for eLearning.

Digital network literacy - while still emerging as a new form of literacy, may be defined by the following statement: "...the set of abilities and skills where aural, visual and digital literacy overlap. These include the ability to understand the power of images and sounds, to recognize and use that power, to manipulate and transform digital media, to distribute them pervasively, and to easily adapt them to new forms" (The New Media Consortium (2004). A global imperative: The report of the 21st Century literacy summit. Available at: http://www.newmediacenter.org/pdf/Global_Imperative.pdf)

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The project is part of a bigger project called: Implementing e-Learning Guidelines across the Tertiary Sector, and is resourced by the 2007/2008 Innovation and Development Fund supplied by the Tertiary Education Commission.

How will potential participants be identified and accessed?

All participants who have completed the course called *Designing for Flexible Learning Practice*, and the course

requirements are invited to take part in the research evaluation. You will receive this information both by email and internal post along with the invitation to participate.

What will my participation involve?

Should you agree to take part in this project you will be asked to do the following:

1. complete a survey - this will contain general demographic questions and also questions about digital networking and confidence in using eLearning tools and methods. It is expected the survey will take approximately 20 minutes to complete.
2. participate in a one hour long focus group - this will be facilitated by a researcher who was not involved in teaching or administering the course. The purpose of the focus group will be to explore aspects of your experience participating in the course and your perceptions of your own digital network literacy and self-efficacy in eLearning. The focus group discussion will build on information obtained in the survey. Data will be obtained during the focus groups using notes and audio recordings. Focus group recordings will be transcribed and analysed for patterns and themes.
3. check the transcription of the focus group session, and this is optional – it is expected to take up to 30 minutes of your time.
4. give permission for any material submitted for assessment in the course to be examined by the researchers. The assessments will be examined to determine your level of digital network literacy and self-efficacy in eLearning.

In total, your participation in the project is expected to take approximately one hour and fifty minutes, depending on whether you choose to check the transcription of the focus group.

How will confidentiality and/or anonymity be protected?

All material collected during the course of the project will be kept confidential between the researchers and research assistant. Raw data will be coded and your names removed prior to the researchers having access to it. Transcriptions of the focus group interviews will be identified using codes for names. Only pseudonyms will be used in the project reports and publications and any information which could potentially identify participants will be excluded.

What data or information will be collected and how will it be used?

Results of this project will be published in a report and possibly in a journal article and/or used at a presentation in an academic conference. Any data included will in no way be linked to any specific participant or department. The findings will also be presented as a case study and will contribute to the bank of case studies of best practice being created as part of a larger project called: Implementing e-Learning Guidelines across the Tertiary Sector; a larger Innovation Development Fund (IDF) project, supported by TEC.

The research evaluation of the DFLP course at Otago Polytechnic is part of one of twenty-one smaller projects testing a range of eLearning Guidelines established for the New Zealand tertiary sector.

You may request a copy of the results of the project and it will be available by contacting Bronwyn Hegarty by email at: bronwynh@tekotago.ac.nz or: Terry Marler by email at: tmarler@tekotago.ac.nz

Data Storage

The data collected will be securely stored in such a way that only the researchers and/or the research assistant will have access to it. At the end of the project any personal information will be destroyed. Any raw data on which the results are based will be retained in secure storage for a period of five years, after which it will be destroyed.

Can participants change their minds and withdraw from the project?

You can decline to participate without any disadvantage to yourself of any kind. If you choose to participate, you may withdraw from the project at any time, without giving reasons for your withdrawal. You can also withdraw any information that has already been supplied until the stage agreed on in the consent form. You can also refuse to answer any particular question, and ask for the audio to be turned off at any stage.

What if participants have any questions?

If you have any questions about the project, either now or in the future, please feel free to contact either: Bronwyn Hegarty – ph: 4793600 or cell: 021 735438 or email: bronwynh@tekotago.ac.nz or: Terry Marler – cell: 021 735496 or email: tmarler@tekotago.ac.nz

Any additional information given or conditions agreed to will be noted on the consent form.

Consent Form

Project title

The power of design on flexible learning and digital network literacy

I have read the information sheet concerning this project and understand what it is about. All my questions have been answered to my satisfaction. I understand that I am free to request further information at any stage.

I know that:

- My participation in the project is entirely voluntary.
- I am free to withdraw at any time without giving reasons and without any disadvantage.
- The data (including audio tapes) will be *destroyed* at the conclusion of the project but any raw data on which the results of the project depend will be retained in secure storage for five years after which it will *be destroyed*. If it is to be kept longer than five years my permission will be sought.
- The results of the project will be published in a project report and may be published in a journal article and/or used at a presentation in an academic conference, but my anonymity / confidentiality will be preserved.

Additional information given or conditions agreed to

I will also be given the opportunity to check the transcription of the focus group session, but this is optional. I know I can withdraw any information I provide to the researchers up until they have started to analyse the transcriptions of the focus group sessions.

I agree to take part in this project under the conditions set out in the Information Sheet.

..... (signature of participant)

..... (date)

..... (signature of researcher)

This project has been reviewed and approved by the Otago Polytechnic Ethics Committee.

References/Bibliography

List relevant books/articles you have referred to in your proposal.

Hegarty, B., Penman, M., Brown, C., Coburn, D., Kelly, O., Gower, C., Sherson, G., Suddaby, G. & Moore, M. (2005). Approaches and implications of eLearning adoption in relation to academic staff efficacy and working practice. Universal College of Learning & Ministry of Education. Ministry of Education, New Zealand. Available at: <http://cms.steo.govt.nz/NR/rdonlyres/8C221A73-CF28-4CC9-83E8-B8FD7D9C1164/0/ALETfinalReport251006.pdf>

Milne, J. & Suddaby, G. (2005). eLearning guidelines: final report for the New Zealand quality standards framework guidelines project, eCDF 171. Tertiary Education Commission and Ministry of Education, New Zealand. Available at: <http://elg.massey.ac.nz>

The New Media Consortium (2004). A global imperative: The report of the 21st Century literacy summit. Available at: http://www.newmediacenter.org/pdf/Global_Imperative.pdf

If your project generates income who will be the recipient of that income?

Not applicable